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DEC 19 2019

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Hrozes Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources
EMNRD-OGD-ARTESIA
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102

August 1, 2011

Submit one copy to appropriate

District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT ACTUAL AS-DRILLED PLAT

¹ API Number 30-015-45744	² Pool Code 98220	³ Pool Name PURPLE SAGE WOLFCAMP GAS POOL
⁴ Property Code 325000	⁵ Property Name SHEPHERD 3-2-23-27-FEE	⁶ Well Number 401H
⁷ OGRID No. 264289	⁸ Operator Name WPX ENERGY PERMITAN, LLC	⁹ Elevation 3,112'

¹⁰ Surface Location

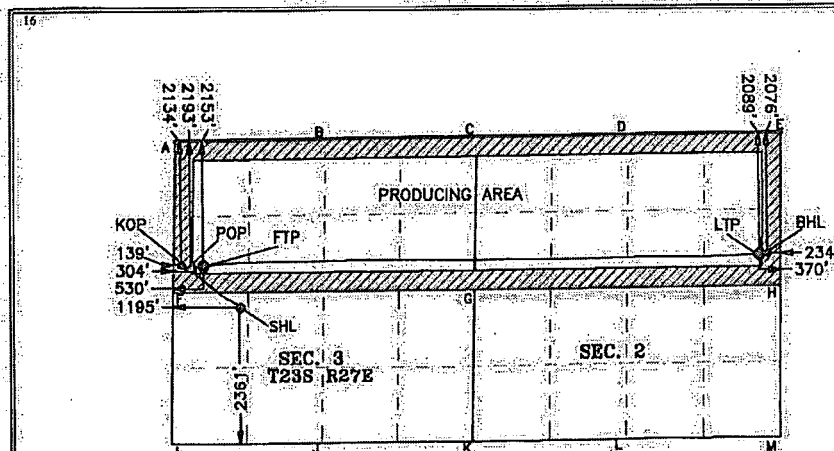
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	3	23 S	27 E		2,361	SOUTH	1,195	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	2	23 S	27 E		2,076	NORTH	234	EAST	EDDY

¹² Dedicated Acres 638.4 AC N/2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



SURFACE LOCATION
NAD 83 NME
Y= 485,091.6
X= 587,845.9
LAT= 32.333499°N
LONG= 104.182753°W
NAD 27 NME
Y= 485,032.4
X= 546,684.4
LAT= 32.333380°N
LONG= 104.182251°W

POP
MD= 9,100'
NAD 83 NME
Y= 485,776.0
X= 586,967.3
LAT= 32.335383°N
LONG= 104.185595°W
NAD 27 NME
Y= 485,716.8
X= 545,785.8
LAT= 32.335264°N
LONG= 104.185093°W

LAST TAKE POINT
MD= 19,112'
NAD 83 NME
Y= 485,966.0
X= 596,920.7
LAT= 32.335864°N
LONG= 104.153387°W
NAD 27 NME
Y= 485,906.7
X= 555,739.1
LAT= 32.335744°N
LONG= 104.152866°W

FIRST TAKE POINT
MD= 9,371'
NAD 83 NME
Y= 485,818.0
X= 587,193.4
LAT= 32.335498°N
LONG= 104.184862°W
NAD 27 NME
Y= 485,758.8
X= 546,011.9
LAT= 32.335379°N
LONG= 104.184361°W

KOP
MD= 8,644'
NAD 83 NME
Y= 485,833.1
X= 586,802.4
LAT= 32.335541°N
LONG= 104.186128°W
NAD 27 NME
Y= 485,773.9
X= 545,620.9
LAT= 32.335422°N
LONG= 104.185626°W

BOTTOM HOLE LOCATION
MD= 19,249'
NAD 83 NME
Y= 485,979.6
X= 597,058.8
LAT= 32.335901°N
LONG= 104.152926°W
NAD 27 NME
Y= 485,920.3
X= 555,875.2
LAT= 32.335781°N
LONG= 104.152425°W

¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Dana Thompson 12/04/2019
Signature Date

Dana Thompson

Printed Name

dana.thompson@wpxenergy.com

E-mail Address

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

12-02-2019

Date of Survey

Signature and Seal of Professional Surveyor:

Mark Dillon Harp
MARK DILLON HARP 23786
Certificate Number



RR

2018041045

Rev 1-29-2020

Intent: ☐ As Drilled ☒

API # 30-015-45744		
Operator Name: WPX ENERGY PERMIAN, LLC	Property Name: SHEPHERD 3-2-23-27 FEE	Well Number 401H

Kick Off Point (KOP)

UL L	Section 03	Township 23S	Range 27E	Lot	Feet 2134	From N/S NORTH	Feet 139	From E/W WEST	County EDDY
Latitude 32.333499° N					Longitude 104.182753° W			NAD 83 NME	

First Take Point (FTP)

UL L	Section 03	Township 23S	Range 27E	Lot	Feet 2153	From N/S NORTH	Feet 304	From E/W WEST	County EDDY
Latitude 32.335498° N					Longitude 104.184862° W			NAD 83 NME	

Last Take Point (LTP)

UL H	Section 2	Township 23S	Range 27E	Lot	Feet 2089	From N/S NORTH	Feet 370	From E/W EAST	County EDDY
Latitude 32.335864° N					Longitude 104.153367° W			NAD 83 NME	

Is this well the defining well for the Horizontal Spacing Unit?

☒

Is this well an infill well?

☐ N

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018



Scientific Drilling International, Inc.
325 Faudree Road
Odessa, Texas 79765
Tel: 432.689.5600 Fax: 432.563.6255
www.scientificdrilling.com

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EMNRD-OCD ARTESIA

State of New Mexico
County of Eddy

I, Jeremy Rounsavall, certify that; I am employed by Scientific Drilling International; that I did on the day(s) of 03/11/2019 through 04/08/2019 conduct or supervise the taking of a MWD survey from a depth of 179 feet to a depth of 19176 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Scientific Drilling International; that I am authorized and qualified to make this report; that this survey was conducted at the request of WPX Energy for the Shepherd 3-2-23-27 Fee 401H Well, API# 30-015-45744 in Eddy County, New Mexico; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Scientific Drilling International.


Field Technician

WPX Energy, Permian
 Shepherd 3-2-23-27 Fee 401H - Actual

Eddy County, New Mexico (NAD 83)
 Dalmatian/Shepherd 3-2-23-27 Fee Pad
 Your Ref:
 4/10/2019

Measured Depth (ft)	Incl.	Azim:	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Grid X	Grid Y	SSTVD
0	0	0	0	0	0	0	0	587845.9	485091.6	-3138
179	0.46	8.95	179	0.71	0.11	0.12	0.26	587846	485092.3	-2959
240	1.17	17.86	239.99	1.54	0.34	0.35	1.18	587846.2	485093.1	-2898.01
331	1.08	58.7	330.98	2.87	1.36	1.38	0.87	587847.3	485094.5	-2807.02
349	1.16	74.41	348.97	3.01	1.68	1.71	1.76	587847.6	485094.6	-2789.03
510	1.62	96.06	509.93	3.21	5.51	5.54	0.43	587851.4	485094.8	-2628.07
606	1.71	97.92	605.88	2.87	8.28	8.3	0.11	587854.2	485094.5	-2532.12
698	0.94	79.79	697.86	2.81	10.38	10.41	0.94	587856.3	485094.4	-2440.14
790	0.76	43.9	789.85	3.39	11.55	11.58	0.6	587857.5	485095	-2348.15
883	0.87	47.17	882.84	4.31	12.49	12.53	0.13	587858.4	485095.9	-2255.16
975	0.84	49.09	974.83	5.23	13.52	13.56	0.05	587859.4	485096.8	-2163.17
1068	0.76	47.72	1067.82	6.09	14.49	14.54	0.09	587860.4	485097.7	-2070.18
1160	0.73	78.03	1159.81	6.62	15.51	15.57	0.42	587861.4	485098.2	-1978.19
1252	0.48	117.03	1251.81	6.57	16.43	16.48	0.51	587862.3	485098.2	-1886.19
1344	0.64	172.05	1343.81	5.88	16.84	16.89	0.58	587862.7	485097.5	-1794.19
1437	0.76	163.98	1436.8	4.78	17.08	17.13	0.17	587863	485096.4	-1701.2
1531	0.6	198.94	1530.79	3.71	17.1	17.13	0.46	587863	485095.3	-1607.21
1626	0.69	230.92	1625.79	2.88	16.49	16.52	0.38	587862.4	485094.5	-1512.21
1720	0.58	198.23	1719.78	2.07	15.9	15.92	0.4	587861.8	485093.7	-1418.22
1815	0.18	350.01	1814.78	1.76	15.73	15.74	0.78	587861.6	485093.4	-1323.22
1909	0.78	334.62	1908.78	2.49	15.43	15.45	0.65	587861.3	485094.1	-1229.22
2004	0.83	332.74	2003.77	3.68	14.83	14.87	0.06	587860.7	485095.3	-1134.23
2028	0.83	330.26	2027.76	3.99	14.67	14.7	0.15	587860.6	485095.6	-1110.24
2144	0.76	319.73	2143.75	5.3	13.75	13.8	0.14	587859.7	485096.9	-994.25
2238	1.39	323.26	2237.74	6.69	12.67	12.73	0.67	587858.6	485098.3	-900.26
2333	4.44	318.03	2332.6	10.35	9.52	9.61	3.22	587855.4	485102	-805.4
2427	6.83	316.65	2426.14	17.12	3.25	3.4	2.55	587849.2	485108.7	-711.86
2522	9.74	313.98	2520.14	26.81	-6.41	-6.18	3.09	587839.5	485118.4	-617.86
2617	12.15	312.01	2613.41	39.08	-19.63	-19.29	2.57	587826.3	485130.7	-524.59
2711	14.22	303.18	2704.93	52.03	-36.64	-36.19	3.07	587809.3	485143.6	-433.07
2806	15.75	296.65	2796.7	64.2	-57.93	-57.38	2.4	587788	485155.8	-341.3
2901	15.16	295.04	2888.27	75.24	-80.71	-80.06	0.77	587765.2	485166.8	-249.73
2995	15.1	293.16	2979.01	85.26	-103.11	-102.36	0.53	587742.8	485176.9	-158.99
3090	15.69	295.28	3070.6	95.61	-126.1	-125.26	0.86	587719.8	485187.2	-67.4
3185	16.73	298.39	3161.83	107.59	-149.74	-148.81	1.43	587696.2	485199.2	23.83
3279	16.49	297.58	3251.9	120.2	-173.47	-172.42	0.35	587672.4	485211.8	113.9
3374	16.68	296.29	3342.95	132.49	-197.65	-196.49	0.44	587648.3	485224.1	204.95

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Grid X	Grid Y	SSTVD
3469	16.62	296.92	3433.97	144.68	-221.98	-220.72	0.2	587623.9	485236.3	295.97
3564	15.9	302.49	3525.18	157.82	-245.07	-243.7	1.81	587600.8	485249.4	387.18
3658	15.92	300.89	3615.57	171.35	-267	-265.5	0.47	587578.9	485263	477.57
3753	16.18	301.41	3706.87	184.94	-289.48	-287.86	0.31	587556.4	485276.5	568.87
3848	16.13	308.08	3798.13	199.98	-311.16	-309.42	1.95	587534.7	485291.6	660.13
3943	16.37	307.21	3889.33	216.21	-332.21	-330.32	0.36	587513.7	485307.8	751.33
4037	16.39	304.89	3979.52	231.81	-353.64	-351.62	0.7	587492.3	485323.4	841.52
4132	15.8	302.5	4070.8	246.43	-375.54	-373.39	0.93	587470.4	485338	932.8
4227	15.02	303.77	4162.38	260.22	-396.68	-394.41	0.89	587449.2	485351.8	1024.38
4321	15.65	311.69	4253.04	275.42	-416.28	-413.88	2.32	587429.6	485367	1115.04
4416	15.41	310.68	4344.57	292.17	-435.42	-432.87	0.38	587410.5	485383.8	1206.57
4510	17.17	314.91	4434.8	310.11	-454.72	-452.01	2.26	587391.2	485401.7	1296.8
4605	16.88	313.59	4525.64	329.52	-474.64	-471.77	0.51	587371.3	485421.1	1387.64
4700	16.01	312.38	4616.75	347.86	-494.31	-491.27	0.98	587351.6	485439.5	1478.75
4795	15.98	313.14	4708.07	365.63	-513.53	-510.34	0.22	587332.4	485457.2	1570.07
4889	17.46	314.53	4798.1	384.37	-533.02	-529.67	1.63	587312.9	485476	1660.1
4984	16.97	313.08	4888.84	403.84	-553.31	-549.79	0.69	587292.6	485495.4	1750.84
5079	16.72	310.02	4979.77	422.09	-573.9	-570.22	0.97	587272	485513.7	1841.77
5173	17.13	306.87	5069.7	439.09	-595.33	-591.5	1.07	587250.6	485530.7	1931.7
5268	16.67	305.51	5160.59	455.4	-617.62	-613.64	0.64	587228.3	485547	2022.59
5363	16.36	303.69	5251.68	470.74	-639.84	-635.73	0.63	587206.1	485562.3	2113.68
5457	15.74	303	5342.01	485.03	-661.55	-657.32	0.69	587184.4	485576.6	2204.01
5552	15.24	302	5433.56	498.66	-682.94	-678.59	0.6	587163	485590.3	2295.56
5647	15.94	308.51	5525.07	513.4	-703.74	-699.26	1.98	587142.2	485605	2387.07
5741	17.27	312.2	5615.15	530.81	-724.18	-719.55	1.8	587121.7	485622.4	2477.15
5836	17.12	312.55	5705.91	549.74	-744.93	-740.13	0.19	587101	485641.3	2567.91
5931	13.96	310.36	5797.42	566.62	-763.97	-759.02	3.38	587081.9	485658.2	2659.42
6025	12.68	310.57	5888.89	580.67	-780.44	-775.38	1.36	587065.5	485672.3	2750.89
6120	12.75	308.64	5981.56	594	-796.55	-791.37	0.45	587049.4	485685.6	2843.56
6215	16.85	307.06	6073.39	608.85	-815.74	-810.43	4.34	587030.2	485700.5	2935.39
6310	15.62	307.27	6164.6	624.9	-836.9	-831.45	1.3	587009	485716.5	3026.6
6404	15.14	304.73	6255.24	639.55	-857.06	-851.48	0.88	586988.8	485731.2	3117.24
6499	14.86	304.11	6347	653.45	-877.34	-871.64	0.34	586968.6	485745.1	3209
6594	15	305.95	6438.79	667.5	-897.38	-891.56	0.52	586948.5	485759.1	3300.79
6688	14.87	309.2	6529.62	682.27	-916.58	-910.63	0.9	586929.3	485773.9	3391.62
6739	14.19	313.79	6578.99	690.73	-926.16	-920.14	2.62	586919.7	485782.3	3440.99
6833	12.28	317.72	6670.49	706.1	-941.2	-935.05	2.24	586904.7	485797.7	3532.49
6928	9.83	314.91	6763.72	719.3	-953.75	-947.47	2.64	586892.2	485810.9	3625.72
7023	8.21	311.26	6857.54	729.5	-964.59	-958.23	1.81	586881.3	485821.1	3719.54
7118	5.97	310.36	6951.81	737.17	-973.45	-967.03	2.36	586872.5	485828.8	3813.81
7212	4.72	305.18	7045.4	742.57	-980.34	-973.87	1.42	586865.6	485834.2	3907.4
7307	4.8	302.99	7140.07	746.98	-986.87	-980.36	0.21	586859	485838.6	4002.07
7402	4.7	304.41	7234.75	751.35	-993.41	-986.86	0.16	586852.5	485843	4096.75
7496	4.56	306.64	7328.44	755.75	-999.59	-993	0.24	586846.3	485847.4	4190.44
7591	3.55	303.56	7423.2	759.63	-1005.07	-998.45	1.09	586840.8	485851.2	4285.2
7686	2.88	293.96	7518.05	762.23	-1009.7	-1003.06	0.9	586836.2	485853.8	4380.05
7780	2.53	283.3	7611.95	763.66	-1013.88	-1007.22	0.65	586832	485855.3	4473.95
7875	2.99	290.16	7706.84	765	-1018.25	-1011.57	0.6	586827.7	485856.6	4568.84
7969	2.8	277.75	7800.72	766.16	-1022.82	-1016.14	0.7	586823.1	485857.8	4662.72
8064	3.12	265.65	7895.59	766.27	-1027.7	-1021.02	0.74	586818.2	485857.9	4757.59
8159	3.33	262.27	7990.44	765.71	-1033.01	-1026.33	0.3	586812.9	485857.3	4852.44

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Grid X	Grid Y	SSTVD
8254	2.89	251.56	8085.3	764.58	-1038.02	-1031.35	0.77	586807.9	485856.2	4947.3
8348	2.55	210.63	8179.21	762.03	-1041.33	-1034.69	2.05	586804.6	485853.6	5041.21
8443	3.17	194.24	8274.09	757.66	-1043.05	-1036.45	1.07	586802.9	485849.3	5136.09
8495	2.99	195.76	8326.01	754.96	-1043.78	-1037.19	0.38	586802.1	485846.6	5188.01
8549	3.06	194.09	8379.94	752.21	-1044.51	-1037.95	0.21	586801.4	485843.8	5241.94
8644	10.16	169.14	8474.26	741.51	-1043.55	-1037.08	7.89	586802.4	485833.1	5336.26
8739	19.74	143.22	8566.03	720.36	-1032.32	-1026.04	12.06	586813.6	485812	5428.03
8782	22.18	142.66	8606.18	708.09	-1023.05	-1016.87	5.69	586822.9	485799.7	5468.18
8833	24.3	127.79	8653.08	693.99	-1008.91	-1002.85	12.2	586837	485785.6	5515.08
8880	25.64	115.19	8695.72	683.73	-992.05	-986.08	11.65	586853.9	485775.3	5557.72
8928	26.52	101.83	8738.87	677.1	-972.15	-966.24	12.35	586873.8	485768.7	5600.87
8976	28.81	91.86	8781.4	674.53	-950.08	-944.2	10.74	586895.8	485766.1	5643.4
9023	33.55	84.33	8821.61	675.45	-925.82	-919.93	13.04	586920.1	485767.1	5683.61
9117	43.97	75.14	8894.87	686.42	-868.22	-862.24	12.64	586977.7	485778	5756.87
9212	56.43	78.3	8955.57	702.97	-797.3	-791.18	13.36	587048.6	485794.6	5817.57
9307	70.7	80.82	8997.76	718.23	-713.85	-707.59	15.21	587132.1	485809.8	5859.76
9365	79.31	83.67	9012.76	725.76	-658.39	-652.07	15.58	587187.5	485817.4	5874.76
9460	80.76	84.65	9029.2	735.27	-565.31	-558.92	1.83	587280.6	485826.9	5891.2
9554	81.48	84.98	9043.71	743.67	-472.82	-466.35	0.84	587373.1	485835.3	5905.71
9649	84.65	86.23	9055.18	750.89	-378.81	-372.28	3.58	587467.1	485842.5	5917.18
9744	88.79	85.5	9060.61	757.73	-284.23	-277.65	4.42	587561.7	485849.3	5922.61
9839	88.79	84.36	9062.62	766.12	-189.62	-182.97	1.2	587656.3	485857.7	5924.62
9933	91.71	85.83	9062.21	774.16	-95.98	-89.27	3.48	587749.9	485865.8	5924.21
10028	90.77	89.4	9060.15	778.11	-1.1	5.64	3.89	587844.8	485869.7	5922.15
10122	89.66	89.51	9059.8	779	92.89	99.64	1.19	587938.8	485870.6	5921.8
10217	87.48	88.41	9062.17	780.73	187.84	194.6	2.57	588033.7	485872.3	5924.17
10312	88.56	88.31	9065.45	783.44	282.74	289.52	1.14	588128.6	485875	5927.45
10407	87.75	88.84	9068.51	785.8	377.66	384.46	1.02	588223.6	485877.4	5930.51
10501	88.66	89.64	9071.45	787.05	471.61	478.41	1.29	588317.5	485878.7	5933.45
10596	87.18	89.69	9074.9	787.61	566.54	573.35	1.56	588412.4	485879.2	5936.9
10691	87.65	88.69	9079.19	788.95	661.43	668.25	1.16	588507.3	485880.6	5941.19
10786	89.73	90.26	9081.36	789.82	756.39	763.21	2.74	588602.3	485881.4	5943.36
10881	89.06	91.08	9082.36	788.71	851.38	858.19	1.11	588697.3	485880.3	5944.36
10976	86.77	90.21	9085.82	787.64	946.31	953.1	2.58	588792.2	485879.2	5947.82
11071	87.28	89.99	9090.75	787.47	1041.18	1047.97	0.58	588887.1	485879.1	5952.75
11165	90.07	89.85	9092.92	787.6	1135.14	1141.93	2.97	588981	485879.2	5954.92
11260	87.55	89.59	9094.89	788.07	1230.11	1236.9	2.67	589076	485879.7	5956.89
11355	88.72	90	9097.99	788.41	1325.06	1331.85	1.3	589171	485880	5959.99
11450	87.01	88.73	9101.52	789.46	1419.98	1426.77	2.24	589265.9	485881.1	5963.52
11545	87.38	87.51	9106.17	792.57	1514.82	1521.63	1.34	589360.7	485884.2	5968.17
11639	87.32	88.43	9110.52	795.9	1608.66	1615.5	0.98	589454.6	485887.5	5972.52
11734	88.49	88.82	9113.99	798.17	1703.56	1710.42	1.3	589549.5	485889.8	5975.99
11829	88.79	88.09	9116.25	800.74	1798.5	1805.38	0.83	589644.4	485892.3	5978.25
11924	87.52	87.18	9119.31	804.65	1893.37	1900.27	1.64	589739.3	485896.3	5981.31
12019	88.89	86.61	9122.28	809.8	1988.18	1995.13	1.56	589834.1	485901.4	5984.28
12114	91.14	87.42	9122.26	814.74	2083.04	2090.03	2.52	589928.9	485906.3	5984.26
12209	91.18	89.85	9120.33	817.01	2177.99	2184.99	2.56	590023.9	485908.6	5982.33
12304	92.12	90.15	9117.6	817.01	2272.95	2279.95	1.04	590118.9	485908.6	5979.6
12398	88.66	91.74	9116.96	815.46	2366.92	2373.9	4.05	590212.8	485907.1	5978.96
12493	88.96	91.75	9118.93	812.56	2461.85	2468.8	0.32	590307.8	485904.2	5980.93
12588	89.36	91.42	9120.32	809.94	2556.81	2563.73	0.55	590402.7	485901.5	5982.32

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Grid X	Grid Y	SSTVD
12683	87.92	90.06	9122.58	808.71	2651.77	2658.68	2.08	590497.7	485900.3	5984.58
12778	91.34	90.65	9123.19	808.12	2746.75	2753.65	3.65	590592.7	485899.7	5985.19
12872	91.04	90.98	9121.24	806.78	2840.72	2847.61	0.47	590686.6	485898.4	5983.24
12967	89.53	91.12	9120.77	805.04	2935.7	2942.57	1.6	590781.6	485896.6	5982.77
13062	88.99	91.08	9121.99	803.22	3030.67	3037.52	0.57	590876.6	485894.8	5983.99
13157	90.2	90.87	9122.67	801.6	3125.65	3132.49	1.29	590971.6	485893.2	5984.67
13252	90.17	90.28	9122.36	800.65	3220.65	3227.47	0.62	591066.6	485892.3	5984.36
13346	88.69	90.36	9123.29	800.12	3314.64	3321.45	1.58	591160.5	485891.7	5985.29
13441	88.46	89.84	9125.66	799.96	3409.61	3416.42	0.6	591255.5	485891.6	5987.66
13536	87.82	90.78	9128.74	799.45	3504.56	3511.36	1.2	591350.5	485891.1	5990.74
13631	88.29	90.11	9131.96	798.71	3599.5	3606.29	0.86	591445.4	485890.3	5993.96
13726	91.04	89.61	9132.52	798.94	3694.49	3701.27	2.94	591540.4	485890.5	5994.52
13821	90.2	90.47	9131.49	798.87	3789.48	3796.26	1.27	591635.4	485890.5	5993.49
13930	88.26	90.59	9132.96	797.87	3898.46	3905.23	1.78	591744.4	485889.5	5994.96
14011	86.38	90.21	9136.74	797.3	3979.37	3986.13	2.37	591825.3	485888.9	5998.74
14105	89.93	89.83	9139.77	797.27	4073.3	4080.06	3.8	591919.2	485888.9	6001.77
14200	89.43	89.59	9140.3	797.75	4168.3	4175.06	0.58	592014.2	485889.4	6002.3
14295	87.41	88.87	9142.92	799.02	4263.25	4270.02	2.26	592109.2	485890.6	6004.92
14390	87.68	87.39	9146.99	802.12	4358.11	4364.9	1.58	592204	485893.7	6008.99
14485	88.69	87.99	9150	805.95	4452.98	4459.8	1.24	592298.9	485897.6	6012
14580	88.39	89.65	9152.42	807.9	4547.93	4554.76	1.78	592393.8	485899.5	6014.42
14675	87.62	90.4	9155.73	807.86	4642.87	4649.7	1.13	592488.8	485899.5	6017.73
14769	87.95	89.97	9159.36	807.56	4736.8	4743.62	0.58	592582.7	485899.2	6021.36
14864	87.11	90.28	9163.45	807.35	4831.71	4838.53	0.94	592677.6	485899	6025.45
14959	87.05	90.06	9168.29	807.07	4926.58	4933.4	0.24	592772.5	485898.7	6030.29
15054	89.23	88.92	9171.38	807.92	5021.52	5028.34	2.59	592867.4	485899.5	6033.38
15149	91.58	89.45	9170.7	809.27	5116.5	5123.33	2.54	592962.4	485900.9	6032.7
15244	89.63	89.89	9169.7	809.82	5211.49	5218.32	2.1	593057.4	485901.4	6031.7
15339	91.11	89.47	9169.09	810.35	5306.49	5313.31	1.62	593152.4	485902	6031.09
15433	87.65	90.55	9170.11	810.33	5400.46	5407.29	3.86	593246.4	485901.9	6032.11
15528	85.61	91.42	9175.69	808.7	5495.28	5502.09	2.33	593341.2	485900.3	6037.69
15623	84.13	90.53	9184.18	807.09	5589.88	5596.67	1.82	593435.8	485898.7	6046.18
15718	83.97	90.26	9194.03	806.44	5684.37	5691.15	0.33	593530.3	485898	6056.03
15813	85.92	89.9	9202.4	806.31	5778.99	5785.77	2.09	593624.9	485897.9	6064.4
15908	86.61	90.04	9208.59	806.36	5873.79	5880.56	0.74	593719.7	485898	6070.59
16002	88.12	90.05	9212.91	806.28	5967.69	5974.46	1.61	593813.6	485897.9	6074.91
16097	87.86	88.74	9216.24	807.28	6062.62	6069.39	1.41	593908.5	485898.9	6078.24
16192	88.96	88.48	9218.88	809.59	6157.56	6164.35	1.19	594003.5	485901.2	6080.88
16287	87.56	88.68	9221.76	811.94	6252.48	6259.29	1.49	594098.4	485903.5	6083.76
16382	87.49	87.96	9225.87	814.72	6347.35	6354.18	0.76	594193.3	485906.3	6087.87
16477	89.5	88.13	9228.36	817.96	6442.26	6449.11	2.12	594288.2	485909.6	6090.36
16572	89.03	86.89	9229.58	822.09	6537.16	6544.04	1.4	594383.1	485913.7	6091.58
16666	89.7	88.33	9230.62	826.01	6631.07	6637.98	1.69	594477	485917.6	6092.62
16761	89.73	89.71	9231.1	827.63	6726.05	6732.97	1.45	594572	485919.2	6093.1
16856	89.63	89.37	9231.63	828.4	6821.05	6827.97	0.37	594667	485920	6093.63
16951	88.93	88.3	9232.82	830.33	6916.02	6922.96	1.35	594761.9	485921.9	6094.82
17045	89.8	87.38	9233.86	833.87	7009.94	7016.91	1.35	594855.8	485925.5	6095.86
17140	90.2	90.3	9233.86	835.79	7104.91	7111.89	3.1	594950.8	485927.4	6095.86
17235	87.39	89.2	9235.86	836.21	7199.88	7206.86	3.18	595045.8	485927.8	6097.86
17330	89.53	92.12	9238.41	835.11	7294.82	7301.79	3.81	595140.7	485926.7	6100.41
17424	88.32	90.56	9240.18	832.92	7388.78	7395.72	2.1	595234.7	485924.5	6102.18

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Grid X	Grid Y	SSTVD
17519	89.66	90.2	9241.85	832.29	7483.76	7490.69	1.46	595329.7	485923.9	6103.85
17614	90	89.35	9242.13	832.66	7578.76	7585.69	0.96	595424.7	485924.3	6104.13
17709	88.05	89.01	9243.75	834.02	7673.73	7680.67	2.08	595519.6	485925.6	6105.75
17803	88.69	89.49	9246.42	835.25	7767.68	7774.63	0.85	595613.6	485926.9	6108.42
17898	88.83	89.69	9248.48	835.93	7862.66	7869.61	0.26	595708.6	485927.5	6110.48
17993	86.31	88.31	9252.51	837.58	7957.55	7964.51	3.02	595803.5	485929.2	6114.51
18088	88.38	90.09	9256.91	838.91	8052.43	8059.4	2.87	595898.3	485930.5	6118.91
18183	87.75	89.09	9260.11	839.59	8147.37	8154.34	1.24	595993.3	485931.2	6122.11
18278	88.86	90.21	9262.92	840.16	8242.32	8249.3	1.66	596088.2	485931.8	6124.92
18373	87.75	89.4	9265.73	840.49	8337.28	8344.25	1.45	596183.2	485932.1	6127.73
18467	90.13	88.76	9267.47	842	8431.24	8438.22	2.62	596277.1	485933.6	6129.47
18562	91.34	88.68	9266.26	844.12	8526.21	8533.21	1.28	596372.1	485935.7	6128.26
18656	89.83	88.29	9265.3	846.6	8620.17	8627.18	1.66	596466.1	485938.2	6127.3
18751	87.88	87.65	9267.19	849.97	8715.08	8722.13	2.16	596561	485941.6	6129.19
18846	87.68	86.61	9270.87	854.72	8809.89	8816.97	1.11	596655.8	485946.3	6132.87
18941	86.95	86.1	9275.32	860.75	8904.59	8911.72	0.94	596750.5	485952.4	6137.32
19035	86.62	85.44	9280.6	867.68	8998.19	9005.38	0.78	596844.1	485959.3	6142.6
19130	86.64	84.56	9286.18	875.94	9092.66	9099.92	0.92	596938.6	485967.5	6148.18
19176	86.74	84.08	9288.84	880.49	9138.36	9145.65	1.06	596984.3	485972.1	6150.84
19249	86.74	84.08	9292.99	888	9210.86	9218.21	0	597056.8	485979.6	6154.99

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to GL 3112 + KB 26 =. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet.

Vertical Section is from Slot and calculated along an Azimuth of 89.503° (Grid).

Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico Eastern Zone.

Central meridian is -104.333°.

Grid Convergence at Surface is 0.081°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 19249.00ft.,
the Bottom Hole Displacement is 9253.56ft., in the Direction of 89.503° (Grid).